



INTERNATIONAL TRADE COMMISSION

[Investigation No. 337-TA-1236]

Certain Polycrystalline Diamond Compacts and Articles Containing Same; Commission Determination to Review in Part a Final Initial Determination Finding No Violation of Section 337; Request for Written Submissions on the Issues Under Review and on Remedy, the Public Interest, and Bonding

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined to review in part a final initial determination (“ID”) issued by the presiding administrative law judge (“ALJ”), finding no violation of section 337 of the Tariff Act of 1930. The Commission requests written submissions from the parties on the issues under review and submissions from the parties, interested government agencies, and interested persons on the issues of remedy, the public interest, and bonding, under the schedule set forth below.

FOR FURTHER INFORMATION CONTACT: Cathy Chen, Office of the General Counsel, U.S. International Trade Commission, 500 E Street SW, Washington, D.C. 20436, telephone 202-205-2392. Copies of non-confidential documents filed in connection with this investigation may be viewed on the Commission’s electronic docket (EDIS) at <https://edis.usitc.gov>. For help accessing EDIS, please email EDIS3Help@usitc.gov. General information concerning the Commission may also be obtained by accessing its Internet server at <https://www.usitc.gov>. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission’s TDD terminal on (202) 205-1810.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on December 29, 2020, based on a complaint filed by US Synthetic Corporation (“USS”) of Orem, Utah. 85 FR 85661 (Dec. 29, 2020). The complaint alleged violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, based upon the importation into the United States, the sale for importation, and the sale within the United States after importation of certain

polycrystalline diamond compacts and articles containing same by reason of infringement of certain claims of U.S. Patent No. 10,507,565 (“the ’565 patent”), U.S. Patent No. 10,508,502 (“the ’502 patent”), U.S. Patent No. 8,616,306 (“the ’306 patent”), U.S. Patent No. 9,932,274 (“the ’274 patent”), and U.S. Patent No. 9,315,881 (“the ’881 patent”). *Id.* The complaint further alleged that an industry in the United States exists as required by section 337. *Id.* The notice of investigation named as respondents: SF Diamond Co., Ltd., and SF Diamond USA, Inc. (collectively, “SF Diamond”); Element Six Abrasives Holdings Ltd., Element Six Global Innovation Centre, Element Six GmbH, Element Six Limited, Element Six Production (Pty) Limited, Element Six Hard Materials (Wuxi) Co. Limited, Element Six Trading (Shanghai) Co., Element Six Technologies US Corporation, Element Six US Corporation, ServSix US, and Synergy Materials Technology Limited (collectively, “Element Six”); Iljin Diamond Co., Ltd., Iljin Holdings Co., Ltd., Iljin USA Inc., Iljin Europe GmbH, Iljin Japan Co., and Ltd., Iljin China Co., Ltd. (collectively, “Iljin”); Henan Jingrui New Material Technology Co., Ltd. (“Jingrui”); Zhenzghou New Asia Superhard Materials Composite Co., Ltd., and International Diamond Services, Inc. (collectively, “New Asia/IDS”); CR Gems Superabrasives Co., Ltd. (“CR Gems”); FIDC Beijing Fortune International Diamond (“FIDC”); Fujian Wanlong Superhard Material Technology Co., Ltd. (“Wanlong”); Zhujau Juxin Technology (“Juxin”);¹ and Shenzhen Haimingrun Superhard Materials Co., Ltd. (“Haimingrun”) (together, “the Respondents”). *Id.* at 85662. The Office of Unfair Import Investigations is not participating in the investigation. *Id.*

USS moved to terminate the investigation as to Element Six and FIDC over the course of the investigation. All of the motions were granted by non-final IDs, and the Commission did not review them. ID at 2 (citing Order Nos. 6, 8, 10, and 16). Thus, the only remaining respondents are Iljin, SF Diamond, New Asia/IDS, Haimingrun, Juxin, CR Gems, Jingrui, and Wanlong.

¹ On February 8, 2021, Guangdong Juxin Materials Technology Co., Inc. was substituted in place of Zhuhai Juxin Technology. ID at 1 n.1 (citing Order No. 8).

USS also moved for partial termination of the investigation with respect to certain asserted patents and claims. All the motions were granted by non-final IDs, and the Commission did not review them. ID at 3 (citing Order Nos. 26, 32, and 57). As such, the '274 and '881 patents have been terminated from the investigation. Claims 1, 2, 4, 6, and 18 of the '565 patent; claims 1, 2, 11, 15, and 21 of the '502 patent; and claim 15 of the '306 patent remain in this investigation (collectively, "the Asserted Patents").

On May 24, 2021, Order No. 23 issued, which construed certain claim terms of the asserted patents. An evidentiary hearing was held on October 18-22, 2021.

On March 3, 2022, the ALJ issued his final ID, finding no violation of section 337 by Respondents. Specifically, the ID found at least one accused product infringes all asserted claims of the Asserted Patents, but those claims are invalid under 35 U.S.C. 101 and/or 102. The ID also found that Complainants have shown that the domestic industry requirement has been satisfied with respect to the Asserted Patents.

On March 15, 2022, Complainant filed a petition for review seeking review of certain patent invalidity findings. That same day, Respondents filed two contingent petitions for review. The first petition submitted by all active Respondents seeks review of certain findings related to infringement, the technical prong of the domestic industry requirement, and invalidity. The second petition submitted by Respondents New Asia, Haimingrun, and Juxin seeks review of Order No. 46, which allowed Complainant to present evidence regarding its revenue-based investment allocation method for the economic prong of the domestic industry requirement. On March 23, 2022, the parties filed separate replies to the petitions for review. On March 31, 2022, the Iljin Respondents submitted their public interest statement. The Commission solicited submissions from the public on public interest issues raised by the recommended determination. No submissions were filed.

Having reviewed the record of the investigation, including the final ID, the parties' submissions to the ALJ, the petitions for review, and the responses thereto, the Commission has

determined to review the ID in part. Specifically, the Commission has determined to review:

(1) the ID's finding that the asserted claims are invalid under 35 U.S.C. 101; (2) the ID's finding that the asserted claims of the '565 patent are not entitled to an earlier priority date and, thus, they are invalid as anticipated by the sale of the CT-57 product; (3) the ID's finding that the Mercury product anticipates claims 1 and 2 of the '565 patent and claims 1 and 11 of the '502 patent; (4) the ID's finding that Respondents did not prove that the asserted claims are not enabled; and (5) the ID's findings regarding the economic prong of the domestic industry requirement (including the ruling allowing USS to supplement its domestic industry contentions with a revenue-based allocation method). The Commission has determined not to review any other findings presented in the final ID, including the ID's finding of no violation of section 337 with respect to the '306 patent.

In connection with its review, Commission requests responses to the following questions. The parties are requested to brief their positions with reference to the applicable law and the existing evidentiary record.

1. Is each of the asserted patent claims directed to an abstract idea under the step one analysis of *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014) and, if so, what do you allege is the abstract idea? Are the claims directed to the abstract idea of "enhanced" or a "high-degree" of diamond-to-diamond bonding?
2. Is each of the individual claimed "performance standards" and "electrical and magnetic side effects," as discussed in the ID, directed to an abstract idea? For each of the claimed PDC characteristics (including coercivity, specific magnetic saturation, specific permeability, average electrical conductivity, G-Ratio, and thermal stability), please discuss the expert testimony and any other record evidence relevant to whether that characteristic is indicative of "the extent of diamond-to-diamond bonding," "the amount of the metal-solvent catalyst present," or any other physical characteristics of the diamond microstructure as discussed in the patent specifications.

3. For any asserted claim that you allege invokes a judicial exception to patentability for being an abstract idea, does the claim recite additional elements that integrate the judicial exception into a practical application under step two of *Alice*? Please discuss whether the structures recited in each claim are well-known, routine, and conventional. *See Yu v. Apple Inc.*, 1 F.4th 1040, 1045 (Fed. Cir. 2021).
4. Do the specifications of U.S. Patent No. 7,866,418 (“the ’418 patent”) and the ’565 patent disclose, either expressly or inherently, an exemplary PDC exhibiting “an average electrical conductivity of less than about 1200 S/m” as required, for example, in claim 1 of the ’565 patent? Please cite the relevant portions of the specification and expert testimony.
5. USS argues that the ID erred in relying on Dr. German’s electrical conductivity measurements of other PDCs because there is no information confirming these other PDCs were manufactured in the same way as the disclosed examples in the ’418 and ’565 patents. *See* Compl. Pet. at 46. Is the way a PDC is manufactured relevant to USS’s argument that electrical conductivity is inherently disclosed in the ’418 patent? If it is relevant, please discuss whether Dr. Barron’s mathematical model to predict the electrical conductivity from cobalt content assumes the same materials and manufacturing conditions as described in the ’418 patent. Is USS’s argument consistent with its contention that the electrical conductivity of a PDC is indicative of “a PDC’s microstructure”? *See id.* at 39.
6. Respondents argue that even if the ’418 patent discloses example PDCs having specific electrical conductivities of less than 1200 S/m, those examples are insufficient to provide written description support for the entire claimed electrical conductivity range of “less than about 1200 S/m.” *See* Resp. Response at 34-37. Was this argument timely raised before the ALJ? Should the Commission find this argument is waived? If not waived, please discuss whether the ’418 patent specification provides written description support

for the entire claimed electrical conductivity range.

7. What evidence in the record supports the ID's finding that the Mercury 1613 sample tested by Mr. Bellin is prior art to the '565 and '502 patents? Please discuss whether and to what extent Mr. Gledhill's testimony regarding manufacturing practices at Diamond Innovations, including his testimony at Tr. 525:17-540:19, was admitted into the record in view of Order No. 48 and the ALJ's oral order at the evidentiary hearing, Tr. 667:5-72:22).
8. Please explain what appropriate methods of valuation provide a reliable estimate of the Complainant's investments in plant and equipment with respect to the articles protected by the '565 and '502 patents, including an explanation of any adjustments that are necessary to approximate those investments based on the record evidence and legal authority for such adjustments. For equipment that is purchased and placed into service years before the DI products are manufactured as described in the ID at page 148, please explain whether governing legal authority requires that the purchase price of the equipment be amortized or depreciated in order to be counted as an "investment in . . . equipment" under section 337(a)(3)(A). Discuss, with relevant legal authority, whether replacement costs may be used as a basis to estimate investments in equipment and if so must any adjustments be made to rely on such replacement costs.

The parties are invited to brief only the discrete issues requested above. The parties are not to brief other issues on review, which are adequately presented in the parties' existing filings.

In connection with the final disposition of this investigation, the statute authorizes issuance of, *inter alia*, (1) an exclusion order that could result in the exclusion of the subject articles from entry into the United States; and/or (2) cease and desist orders that could result in the respondents being required to cease and desist from engaging in unfair acts in the importation and sale of such articles. Accordingly, the Commission is interested in receiving written submissions that address the form of remedy, if any, that should be ordered. If a party seeks

exclusion of an article from entry into the United States for purposes other than entry for consumption, the party should so indicate and provide information establishing that activities involving other types of entry either are adversely affecting it or likely to do so. For background, see *Certain Devices for Connecting Computers via Telephone Lines*, Inv. No. 337-TA-360, USITC Pub. No. 2843, Comm'n Op. at 7-10 (Dec. 1994).

The statute requires the Commission to consider the effects of that remedy upon the public interest. The public interest factors the Commission will consider include the effect that an exclusion order and/or a cease and desist order would have on: (1) the public health and welfare, (2) competitive conditions in the U.S. economy, (3) U.S. production of articles that are like or directly competitive with those that are subject to investigation, and (4) U.S. consumers. The Commission is therefore interested in receiving written submissions that address the aforementioned public interest factors in the context of this investigation.

If the Commission orders some form of remedy, the U.S. Trade Representative, as delegated by the President, has 60 days to approve, disapprove, or take no action on the Commission's determination. See Presidential Memorandum of July 21, 2005, 70 FR 43251 (July 26, 2005). During this period, the subject articles would be entitled to enter the United States under bond, in an amount determined by the Commission and prescribed by the Secretary of the Treasury. The Commission is therefore interested in receiving submissions concerning the amount of the bond that should be imposed if a remedy is ordered.

WRITTEN SUBMISSIONS: The parties to the investigation are requested to file written submissions on the issues identified in this notice. The parties' opening submissions should not exceed **100** pages, and their reply submissions should not exceed **60** pages. Parties to the investigation, interested government agencies, and any other interested parties are encouraged to file written submissions on the issues of remedy, the public interest, and bonding. Such submissions should address the recommended determination by the ALJ on remedy and bonding.

In their initial submissions, Complainant is also requested to identify the remedy sought and Complainant and OUII are requested to submit proposed remedial orders for the Commission's consideration. Complainant is further requested to provide the HTSUS subheadings under which the accused products are imported, and to supply the identification information for all known importers of the products at issue in this investigation. The initial written submissions and proposed remedial orders must be filed no later than close of business on **Monday, May 23, 2022**. Reply submissions must be filed no later than the close of business on **Tuesday, May 31, 2022**. No further submissions on these issues will be permitted unless otherwise ordered by the Commission.

Persons filing written submissions must file the original document electronically on or before the deadlines stated above. The Commission's paper filing requirements in 19 CFR 210.4(f) are currently waived. 85 FR 15798 (March 19, 2020). Submissions should refer to the investigation number (Inv. No. 337-TA-**1236**) in a prominent place on the cover page and/or the first page. (*See Handbook for Electronic Filing Procedures, https://www.usitc.gov/documents/handbook_on_filing_procedures.pdf*). Persons with questions regarding filing should contact the Secretary, (202) 205-2000.

Any person desiring to submit a document to the Commission in confidence must request confidential treatment by marking each document with a header indicating that the document contains confidential information. This marking will be deemed to satisfy the request procedure set forth in Rules 201.6(b) and 210.5(e)(2) (19 CFR 201.6(b) & 210.5(e)(2)). Documents for which confidential treatment by the Commission is properly sought will be treated accordingly. Any non-party wishing to submit comments containing confidential information must serve those comments on the parties to the investigation pursuant to the applicable Administrative Protective Order. A redacted non-confidential version of the document must also be filed with the Commission and served on any parties to the investigation within two business days of any confidential filing. All information, including confidential business information and documents

for which confidential treatment is properly sought, submitted to the Commission for purposes of this investigation may be disclosed to and used: (i) by the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records of this or a related proceeding, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. Appendix 3; or (ii) by U.S. government employees and contract personnel, solely for cybersecurity purposes. All contract personnel will sign appropriate nondisclosure agreements. All nonconfidential written submissions will be available for public inspection on EDIS.

The Commission vote for this determination took place on May 9, 2022.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, and in part 210 of the Commission's Rules of Practice and Procedure, 19 CFR part 210.

By order of the Commission.

Issued: May 9, 2022.

Lisa Barton,

Secretary to the Commission.